

Tools

Sample Diabetes Medical Management Plan *Page 99*

Sample Template for an Individualized Health Care Plan *Page 107*

Sample Emergency Care Plans for Hypoglycemia and Hyperglycemia *Page 109*

Section 3 contains examples of three important tools for helping schools implement effective diabetes management—a sample Diabetes Medical Management Plan, a sample template for an Individualized Health Care Plan, and sample Emergency Care Plans for Hypoglycemia and Hyperglycemia.

- The **Diabetes Medical Management Plan (DMMP)** is completed by the student's personal diabetes health care team and contains the medical orders that are the basis for the student's health care and education plans.
- The **Individualized Health Care Plan (IHP)** is prepared by the school nurse and contains the strategies for implementing the medical orders in the DMMP in the school setting.
- The **Emergency Care Plans for Hypoglycemia and Hyperglycemia**, based on the DMMP, summarize how to recognize and treat hypoglycemia and hyperglycemia and who to contact for help. The school nurse will coordinate development of these plans. Emergency care plans should be completed for each student with diabetes and should be copied and distributed to all school personnel who have responsibility for students with diabetes during the school day and during school-sponsored activities. Provide completed copies to the parents/guardian as well.

How to Use the Tools for Effective Diabetes Management

- The parents/guardian should give the sample Diabetes Medical Management Plan (DMMP) to the student's personal diabetes health care team as a resource for preparing the medical orders.
- The student's personal diabetes health care team should fill out the plan, sign it, review it with the parents/guardian and the student, and return it to the school nurse before the student with diabetes returns to school after diagnosis, or when the student transfers to a new school.
- The student's personal diabetes health care team should review and update the DMMP at the beginning of each school year or upon a change in the student's prescribed care regimen, level of self-management, school circumstances (e.g., a change in schedule), or at the request of the student or parents/guardian or the school nurse.
- The school nurse should prepare the Individualized Health Care Plan (IHP) based on the medical orders in the DMMP and review it with the parents/guardian and the student.
- The school nurse should adapt the sample Emergency Care Plans for Hypoglycemia and Hyperglycemia to meet the needs of individual students, as prescribed in the student's DMMP.
- The Emergency Care Plans should be copied and distributed to all regular and substitute personnel who have responsibility for the student with diabetes during the school day and during school-sponsored activities. Consider laminating these plans for use throughout the school year. Provide copies to the parents/guardian.
- During all levels of training, information in the Emergency Care Plans on the signs and symptoms of hypoglycemia and hyperglycemia, how to respond, and who to contact for help in an emergency should be reviewed with school personnel.

Diabetes Medical Management Plan (DMMP)

This plan should be completed by the student's personal diabetes health care team, including the parents/guardian. It should be reviewed with relevant school staff and copies should be kept in a place that can be accessed easily by the school nurse, trained diabetes personnel, and other authorized personnel.

Date of Plan: _____ This plan is valid for the current school year: _____ - _____

Student's Name: _____ Date of Birth: _____

Date of Diabetes Diagnosis: _____ ☐ type 1 ☐ type 2 ☐ Other _____

School: _____ School Phone Number: _____

Grade: _____ Homeroom Teacher: _____

School Nurse: _____ Phone: _____

CONTACT INFORMATION

Mother/Guardian: _____

Address: _____

Telephone: Home _____ Work _____ Cell: _____

Email Address: _____

Father/Guardian: _____

Address: _____

Telephone: Home _____ Work _____ Cell: _____

Email Address: _____

Student's Physician/Health Care Provider: _____

Address: _____

Telephone: _____

Email Address: _____ Emergency Number: _____

Other Emergency Contacts:

Name: _____ Relationship: _____

Telephone: Home _____ Work _____ Cell: _____

CHECKING BLOOD GLUCOSE

Target range of blood glucose: ☐ 70–130 mg/dL ☐ 70–180 mg/dL

☐ Other: _____

Check blood glucose level: ☐ Before lunch ☐ _____ Hours after lunch

☐ 2 hours after a correction dose ☐ Mid-morning ☐ Before PE ☐ After PE

☐ Before dismissal ☐ Other: _____

☐ As needed for signs/symptoms of low or high blood glucose

☐ As needed for signs/symptoms of illness

Preferred site of testing: ☐ Fingertip ☐ Forearm ☐ Thigh ☐ Other: _____

Brand/Model of blood glucose meter: _____

Note: The fingertip should always be used to check blood glucose level if hypoglycemia is suspected.

Student's self-care blood glucose checking skills:

☐ Independently checks own blood glucose

☐ May check blood glucose with supervision

☐ Requires school nurse or trained diabetes personnel to check blood glucose

Continuous Glucose Monitor (CGM): ☐ Yes ☐ No

Brand/Model: _____ Alarms set for: ☐ (low) and ☐ (high)

Note: Confirm CGM results with blood glucose meter check before taking action on sensor blood glucose level. If student has symptoms or signs of hypoglycemia, check fingertip blood glucose level regardless of CGM.

HYPOGLYCEMIA TREATMENT

Student's usual symptoms of hypoglycemia (list below):

If exhibiting symptoms of hypoglycemia, OR if blood glucose level is less than _____ mg/dL, give a quick-acting glucose product equal to _____ grams of carbohydrate.

Recheck blood glucose in 10–15 minutes and repeat treatment if blood glucose level is less than _____ mg/dL.

Additional treatment: _____

HYPOGLYCEMIA TREATMENT (Continued)

Follow physical activity and sports orders (see page 7).

- If the student is unable to eat or drink, is unconscious or unresponsive, or is having seizure activity or convulsions (jerking movements), give:
- Glucagon: ☐ 1 mg ☐ 1/2 mg Route: ☐ SC ☐ IM
- Site for glucagon injection: ☐ arm ☐ thigh ☐ Other: _____
- Call 911 (Emergency Medical Services) and the student's parents/guardian.
- Contact student's health care provider.

HYPERGLYCEMIA TREATMENT

Student's usual symptoms of hyperglycemia (list below):

Check ☐ Urine ☐ Blood for ketones every _____ hours when blood glucose levels are above _____ mg/dL.

For blood glucose greater than _____ mg/dL AND at least _____ hours since last insulin dose, give correction dose of insulin (see orders below).

For insulin pump users: see additional information for student with insulin pump.

Give extra water and/or non-sugar-containing drinks (not fruit juices): _____ ounces per hour.

Additional treatment for ketones: _____

Follow physical activity and sports orders (see page 7).

- Notify parents/guardian of onset of hyperglycemia.
- If the student has symptoms of a hyperglycemia emergency, including dry mouth, extreme thirst, nausea and vomiting, severe abdominal pain, heavy breathing or shortness of breath, chest pain, increasing sleepiness or lethargy, or depressed level of consciousness: Call 911 (Emergency Medical Services) and the student's parents/guardian.
- Contact student's health care provider.

INSULIN THERAPY

Insulin delivery device: ☐ syringe ☐ insulin pen ☐ insulin pump

Type of insulin therapy at school:

- ☐ Adjustable Insulin Therapy
☐ Fixed Insulin Therapy
☐ No insulin

Adjustable Insulin Therapy

- **Carbohydrate Coverage/Correction Dose:**

Name of insulin: _____

- **Carbohydrate Coverage:**

Insulin-to-Carbohydrate Ratio:

Lunch: 1 unit of insulin per _____ grams of carbohydrate

Snack: 1 unit of insulin per _____ grams of carbohydrate

Carbohydrate Dose Calculation Example

$$\frac{\text{Grams of carbohydrate in meal}}{\text{Insulin-to-carbohydrate ratio}} = \text{_____ units of insulin}$$

- **Correction Dose:**

Blood Glucose Correction Factor/Insulin Sensitivity Factor = _____

Target blood glucose = _____ mg/dL

Correction Dose Calculation Example

$$\frac{\text{Actual Blood Glucose} - \text{Target Blood Glucose}}{\text{Blood Glucose Correction Factor/Insulin Sensitivity Factor}} = \text{_____ units of insulin}$$

Correction dose scale (use instead of calculation above to determine insulin correction dose):

Blood glucose _____ to _____ mg/dL give _____ units

Blood glucose _____ to _____ mg/dL give _____ units

Blood glucose _____ to _____ mg/dL give _____ units

Blood glucose _____ to _____ mg/dL give _____ units

INSULIN THERAPY (Continued)

When to give insulin:

Lunch

- ☐ Carbohydrate coverage only
- ☐ Carbohydrate coverage plus correction dose when blood glucose is greater than _____ mg/dL and _____ hours since last insulin dose.
- ☐ Other: _____

Snack

- ☐ No coverage for snack
- ☐ Carbohydrate coverage only
- ☐ Carbohydrate coverage plus correction dose when blood glucose is greater than _____ mg/dL and _____ hours since last insulin dose.
- ☐ Other: _____

☐ Correction dose only:

For blood glucose greater than _____ mg/dL AND at least _____ hours since last insulin dose.

☐ Other: _____

Fixed Insulin Therapy

Name of insulin: _____

- ☐ _____ Units of insulin given pre-lunch daily
- ☐ _____ Units of insulin given pre-snack daily
- ☐ Other: _____

Parental Authorization to Adjust Insulin Dose:

- ☐ Yes ☐ No Parents/guardian authorization should be obtained before administering a correction dose.
- ☐ Yes ☐ No Parents/guardian are authorized to increase or decrease correction dose scale within the following range: +/- _____ units of insulin.
- ☐ Yes ☐ No Parents/guardian are authorized to increase or decrease insulin-to-carbohydrate ratio within the following range: _____ units per prescribed grams of carbohydrate, +/- _____ grams of carbohydrate.
- ☐ Yes ☐ No Parents/guardian are authorized to increase or decrease fixed insulin dose within the following range: +/- _____ units of insulin.

INSULIN THERAPY (Continued)

Student's self-care insulin administration skills:

- ☐ Yes ☐ No Independently calculates and gives own injections
- ☐ Yes ☐ No May calculate/give own injections with supervision
- ☐ Yes ☐ No Requires school nurse or trained diabetes personnel to calculate/give injections

ADDITIONAL INFORMATION FOR STUDENT WITH INSULIN PUMP

Brand/Model of pump: _____ Type of insulin in pump: _____

Basal rates during school: _____

Type of infusion set: _____

- ☐ For blood glucose greater than _____ mg/dL that has not decreased within _____ hours after correction, consider pump failure or infusion site failure. Notify parents/guardian.
- ☐ For infusion site failure: Insert new infusion set and/or replace reservoir.
- ☐ For suspected pump failure: suspend or remove pump and give insulin by syringe or pen.

Physical Activity

- May disconnect from pump for sports activities ☐ Yes ☐ No
- Set a temporary basal rate ☐ Yes ☐ No _____ % temporary basal for _____ hours
- Suspend pump use ☐ Yes ☐ No

Student's self-care pump skills:

Independent?

- | | | |
|---|------------------------------|-----------------------------|
| Count carbohydrates | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Bolus correct amount for carbohydrates consumed | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Calculate and administer correction bolus | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Calculate and set basal profiles | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Calculate and set temporary basal rate | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Change batteries | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Disconnect pump | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Reconnect pump to infusion set | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Prepare reservoir and tubing | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Insert infusion set | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| Troubleshoot alarms and malfunctions | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

OTHER DIABETES MEDICATIONS

Name: _____ Dose: _____ Route: _____ Times given: _____
 Name: _____ Dose: _____ Route: _____ Times given: _____

MEAL PLAN

Meal/Snack	Time	Carbohydrate Content (grams)
Breakfast	_____	_____ to _____
Mid-morning snack	_____	_____ to _____
Lunch	_____	_____ to _____
Mid-afternoon snack	_____	_____ to _____

Other times to give snacks and content/amount: _____

Instructions for when food is provided to the class (e.g., as part of a class party or food sampling event): _____

Special event/party food permitted: ☐ Parents/guardian discretion
☐ Student discretion

Student's self-care nutrition skills:

☐ Yes ☐ No Independently counts carbohydrates
☐ Yes ☐ No May count carbohydrates with supervision
☐ Yes ☐ No Requires school nurse/trained diabetes personnel to count carbohydrates

PHYSICAL ACTIVITY AND SPORTS

A quick-acting source of glucose such as ☐ glucose tabs and/or ☐ sugar-containing juice must be available at the site of physical education activities and sports.

Student should eat ☐ 15 grams ☐ 30 grams of carbohydrate ☐ other _____
☐ before ☐ every 30 minutes during ☐ after vigorous physical activity
☐ other _____

If most recent blood glucose is less than _____ mg/dL, student can participate in physical activity when blood glucose is corrected and above _____ mg/dL.

Avoid physical activity when blood glucose is greater than _____ mg/dL or if urine/blood ketones are moderate to large.

(Additional information for student on insulin pump is in the insulin section on page 6.)

DISASTER PLAN

To prepare for an unplanned disaster or emergency (72 HOURS), obtain emergency supply kit from parent/guardian.

- ☐ Continue to follow orders contained in this DMMP.
- ☐ Additional insulin orders as follows: _____
- ☐ Other: _____

SIGNATURES

This Diabetes Medical Management Plan has been approved by:

Student's Physician/Health Care Provider	Date
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I, (parent/guardian:) _____ give permission to the school nurse or another qualified health care professional or trained diabetes personnel of (school:) _____ to perform and carry out the diabetes care tasks as outlined in (student:) _____'s Diabetes Medical Management Plan. I also consent to the release of the information contained in this Diabetes Medical Management Plan to all school staff members and other adults who have responsibility for my child and who may need to know this information to maintain my child's health and safety. I also give permission to the school nurse or another qualified health care professional to contact my child's physician/health care provider.

Acknowledged and received by:

Student's Parent/Guardian	Date
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Student's Parent/Guardian	Date
---------------------------	------

School Nurse/Other Qualified Health Care Personnel	Date
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Individualized Health Care Plan (IHP)

Student: _____

Grade: _____

Dates: _____

School Year: _____

IHP Completed by and Date: _____

IHP Review Dates: _____

Nursing Assessment Review: _____

Nursing Assessment Completed by and Date: _____

Nursing Diagnosis	Sample Interventions and Activities	Date Implemented	Sample Outcome Indicator	Date Evaluated
Managing Potential Diabetes Emergencies (risk for unstable blood glucose)	Establish and document student's routine for maintaining blood glucose within goal range including while at school: Blood Glucose Monitoring <ul style="list-style-type: none"> Where to check blood glucose: <ul style="list-style-type: none"> <input type="checkbox"/> Classroom <input type="checkbox"/> Health room <input type="checkbox"/> Other When to check blood glucose: <ul style="list-style-type: none"> <input type="checkbox"/> Before breakfast <input type="checkbox"/> Mid-morning <input type="checkbox"/> Before lunch <input type="checkbox"/> After lunch <input type="checkbox"/> Before snack <input type="checkbox"/> Before PE <input type="checkbox"/> After PE <input type="checkbox"/> 2 hours after correction dose <input type="checkbox"/> Before dismissal <input type="checkbox"/> As needed <input type="checkbox"/> Other: _____ Student Self-Care Skills: <ul style="list-style-type: none"> <input type="checkbox"/> Independent <input type="checkbox"/> Supervision <input type="checkbox"/> Full assistance Brand/model of BG meter: _____ Brand/model of CGM: _____ 		Blood glucose remains in goal range Percentage of Time 0% 25% 50% 75% 100% 1 2 3 4 5	

Individualized Health Care Plan (IHP) (Continued)

Nursing Diagnosis	Sample Interventions and Activities	Date Implemented	Sample Outcome Indicator	Date Evaluated
Supporting the Independent Student (effective therapeutic regimen management)	Hypoglycemia Management STUDENT WILL: <ul style="list-style-type: none"> Check blood glucose when hypoglycemia suspected Treat hypoglycemia (follow Diabetes Emergency Care Plan) Take action following a hypoglycemia episode: _____ Keep quick-acting glucose product to treat on the spot Type: _____ Location: _____ Routinely monitor hypoglycemia trends r/t class schedule (e.g., time of PE, scheduled lunch, recess) and insulin dosing Report and consult with parents/guardian, school nurse, HCP, and school personnel as appropriate 		Monitors Blood Glucose (records, reports, and correctly responds to results) <div> <div>Never Demonstrated</div> <div>Consistently Demonstrated</div> </div> <div>1 2 3 4 5</div>	
Supporting Positive Coping Skills (readiness for enhanced coping)	Environmental Management <ul style="list-style-type: none"> Ensure confidentiality Discuss with parents/guardian and student preference about who should know student's coping status at school Collaborate with parents/guardian and school personnel to meet student's coping needs Collaborate with school personnel to create an accepting and understanding environment 		Readiness to Learn <div> <div>Severely Compromised</div> <div>Not Compromised</div> </div> <div>1 2 3 4 5</div>	

Hypoglycemia Emergency Care Plan

(For Low Blood Glucose)

Student's Name: _____

Grade/Teacher: _____

Date of Plan: _____

Emergency Contact Information

Mother/Guardian: _____

Email address: _____ Home phone: _____

Work phone: _____ Cell: _____

Father/Guardian: _____

Email address: _____ Home phone: _____

Work phone: _____ Cell: _____

Health Care Provider: _____

Phone number: _____

School Nurse: _____

Contact number(s): _____

Trained Diabetes Personnel: _____

Contact number(s): _____

The student should never be left alone, or sent anywhere alone, or with another student, when experiencing hypoglycemia.

Causes of Hypoglycemia	Onset of Hypoglycemia
<ul style="list-style-type: none">• Too much insulin• Missing or delaying meals or snacks• Not eating enough food (carbohydrates)• Getting extra, intense, or unplanned physical activity• Being ill, particularly with gastrointestinal illness	<ul style="list-style-type: none">• Sudden—symptoms may progress rapidly

Hypoglycemia Symptoms

Circle student's usual symptoms.

Mild to Moderate		Severe
<ul style="list-style-type: none"> • Shaky or jittery • Sweaty • Hungry • Pale • Headache • Blurry vision • Sleepy • Dizzy • Confused • Disoriented 	<ul style="list-style-type: none"> • Uncoordinated • Irritable or nervous • Argumentative • Combative • Changed personality • Changed behavior • Inability to concentrate • Weak • Lethargic • Other: _____ 	<ul style="list-style-type: none"> • Inability to eat or drink • Unconscious • Unresponsive • Seizure activity or convulsions (jerking movements)

Actions for Treating Hypoglycemia

Notify School Nurse or Trained Diabetes Personnel as soon as you observe symptoms.

If possible, check blood glucose (sugar) at fingertip.

Treat for hypoglycemia if blood glucose level is less than ____mg/dL.

WHEN IN DOUBT, ALWAYS TREAT FOR HYPOGLYCEMIA AS SPECIFIED BELOW.

Treatment for Mild to Moderate Hypoglycemia	Treatment for Severe Hypoglycemia
<ul style="list-style-type: none"> • Provide quick-acting glucose (sugar) product equal to _____ grams of carbohydrates. Examples of 15 grams of carbohydrates include: <ul style="list-style-type: none"> ○ 3 or 4 glucose tablets ○ 1 tube of glucose gel ○ 4 ounces of fruit juice (not low-calorie or reduced sugar) ○ 6 ounces of soda (½ can) (not low-calorie or reduced sugar) • Wait 10 to 15 minutes. • Recheck blood glucose level. • Repeat quick-acting glucose product if blood glucose level is less than ____mg/dL. • Contact the student's parents/guardian. 	<ul style="list-style-type: none"> • Position the student on his or her side. • Do not attempt to give anything by mouth. • Administer glucagon: _____ mg at _____ site. • While treating, have another person call 911 (Emergency Medical Services). • Contact the student's parents/guardian. • Stay with the student until Emergency Medical Services arrive. • Notify student's health care provider.

Hyperglycemia Emergency Care Plan

(For High Blood Glucose)

Student's Name: _____

Grade/Teacher: _____

Date of Plan: _____

Emergency Contact Information

Mother/Guardian: _____

Email address: _____ Home phone: _____

Work phone: _____ Cell: _____

Father/Guardian: _____

Email address: _____ Home phone: _____

Work phone: _____ Cell: _____

Health Care Provider: _____

Phone number: _____

School Nurse: _____

Contact number(s): _____

Trained Diabetes Personnel: _____

Contact number(s): _____

Causes of Hyperglycemia	Onset of Hyperglycemia
<ul style="list-style-type: none">• Too little insulin or other glucose-lowering medication• Food intake that has not been covered adequately by insulin• Decreased physical activity• Illness• Infection• Injury• Severe physical or emotional stress• Pump malfunction	<ul style="list-style-type: none">• Over several hours or days

Hyperglycemia Signs	Hyperglycemia Emergency Symptoms (Diabetic Ketoacidosis, DKA, which is associated with hyperglycemia, ketosis, and dehydration)
Circle student's usual signs and symptoms.	
<ul style="list-style-type: none"> • Increased thirst and/or dry mouth • Frequent or increased urination • Change in appetite and nausea • Blurry vision • Fatigue • Other: _____ 	<ul style="list-style-type: none"> • Dry mouth, extreme thirst, and dehydration • Nausea and vomiting • Severe abdominal pain • Fruity breath • Heavy breathing or shortness of breath • Chest pain • Increasing sleepiness or lethargy • Depressed level of consciousness

Actions for Treating Hyperglycemia	
Notify School Nurse or Trained Diabetes Personnel as soon as you observe symptoms.	
Treatment for Hyperglycemia	Treatment for Hyperglycemia Emergency
<ul style="list-style-type: none"> • Check the blood glucose level: _____ mg/dL. • Check urine or blood for ketones if blood glucose levels are greater than: _____ mg/dL. • If student uses a pump, check to see if pump is connected properly and functioning. • Administer supplemental insulin dose: _____. • Give extra water or non-sugar-containing drinks (not fruit juices): _____ ounces per hour. • Allow free and unrestricted access to the restroom. • Recheck blood glucose every 2 hours to determine if decreasing to target range of _____ mg/dL. • Restrict participation in physical activity if blood glucose is greater than _____ mg/dL and if ketones are moderate to large. • Notify parents/guardian if ketones are present. 	<ul style="list-style-type: none"> • Call parents/guardian, student's health care provider, and 911 (Emergency Medical Services) right away. • Stay with the student until Emergency Medical Services arrive.